

A Review of the ORS Renewable Electric Generation Facilities Leasing Program



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February 6, 2017**



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Introduction & Background

The South Carolina Office of Regulatory Staff (“ORS”) was created by Act 175 in 2004 and was charged with the responsibility of representing the public interest of South Carolina in utility regulation for the major utility industries. These industries include investor-owned electric, natural gas, telecommunications, transportation, and water/wastewater companies. The ORS mission statement embodies the Act 175 definition of public interest by balancing the concerns of the using and consuming public, the financial integrity of public utilities, and the economic development of South Carolina. Representation by the ORS is provided before the Public Service Commission of SC, the SC General Assembly, federal regulatory bodies, and the court system.¹

I began my employment with the ORS in April 2007, and currently serve as a Senior Regulatory Manager in the Utility Rates and Services Department, more specifically within the Utility Services Division. My main areas of responsibility include the regulation of Demand Side Management/Energy Efficiency and Renewable Energy programs offered by the electric investor-owned utilities (“IOUs”) operating in South Carolina. These include South Carolina Electric & Gas Company (“SCE&G”), Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”). The ORS does not have regulatory jurisdiction over electric cooperatives, municipalities, or state-owned Santee Cooper.

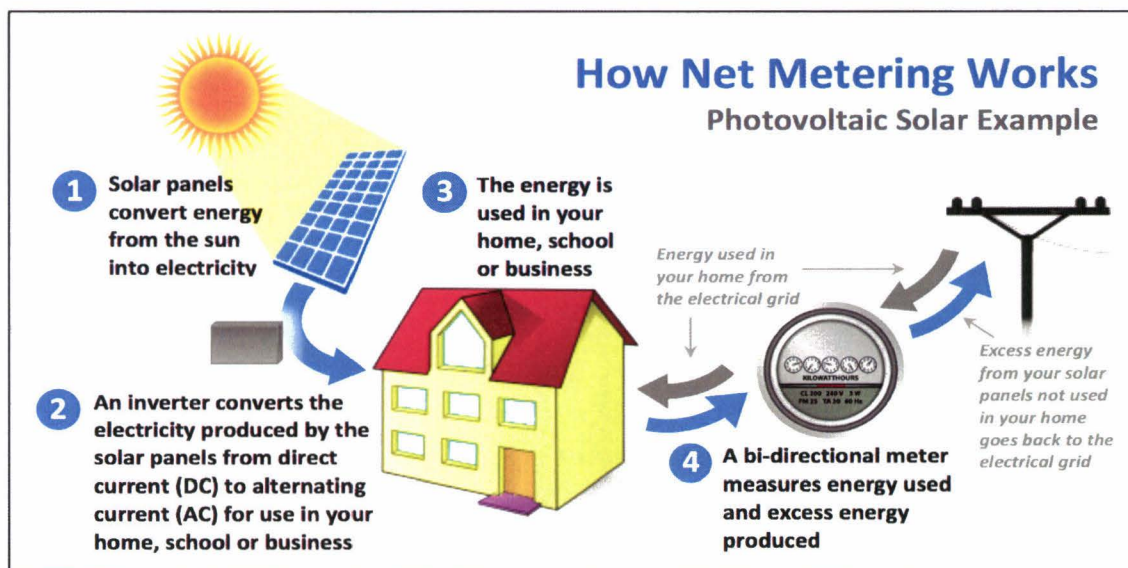
On June 2, 2014, the Distributed Energy Resource (“DER”) Program Act (“Act 236” or “Act”) was signed into law by Governor Nikki Haley. Act 236 was the result of consensus among a diverse group of stakeholders and created a pathway for growth in the renewable energy industry in South Carolina. The goal of Act 236 as stated in S.C. Code Ann. § 58-39-110 is to “promote the establishment of a reliable, efficient, and diversified portfolio of distributed energy resources” for South Carolina. The Act also created a renewable leasing program through the addition of Article 23 to SC Title 58, Chapter 27, entitled “Lease of Renewable Electric Generation Facilities Program” (“Leasing Program” or “the Program”) and the ORS was charged with implementing and regulating the new Program. The term “renewable” includes, but is not limited to, solar photovoltaic (“solar”), biomass, hydroelectric, tidal, and geothermal resources. For the purpose of this review the main focus will pertain to residential leased solar facilities, as solar is the only type of lease currently executed in South Carolina and the majority are in the residential market.

¹ ORS Website: <http://www.regulatorystaff.sc.gov/Pages/default.aspx>

Leasing is a different way to acquire solar power for your home without having to purchase or finance the solar equipment through traditional means. It effectively simplifies solar investment for a homeowner. Typically, a lessor receives all IOU rebates, federal and state tax credits (30% and 25% respectively), and depreciation. This eliminates any upfront out of pocket costs for customers by way of installation, equipment, or interconnection fees. The lessee then makes monthly payments to the lessor, and in turn, the lessor provides equipment warranties, system monitoring and operation and maintenance services, usually over a twenty year term. After this term the lessee may have the option to renew the lease, purchase the system at fair market value, or have the system removed at no cost.²

The intent with solar generation is to offset or meet your own household electrical needs at a lower cost than you would normally pay with sole service from your electric provider. Once a system is installed and operating the lessee uses the solar generation for personal household consumption. Any excess generation not used in the household is directed back onto the electric power grid for use by other customers as if provided by the utility. This billing mechanism is known as net energy metering (“NEM” or “Net Metering”) as illustrated in Figure 1 below.³

FIGURE 1: HOW NET METERING WORKS



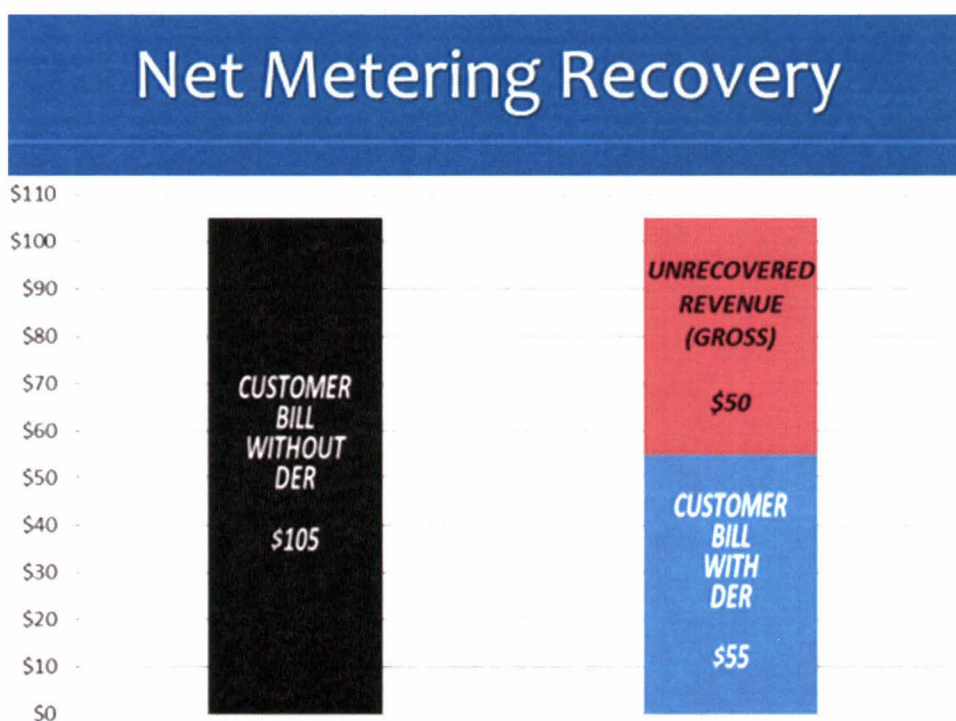
A bi-directional meter cumulatively records the volumetric amount of energy in kilowatt hours (“kWh”) consumed and the kWh surplus placed back to the grid. At the end of each billing period, the utility bills the customer for their net usage. The flaw

² <http://solarprofessional.com/articles/finance-economics/the-evolution-of-residential-solar-leasing>

³ © 2017 Consumers Power Inc.

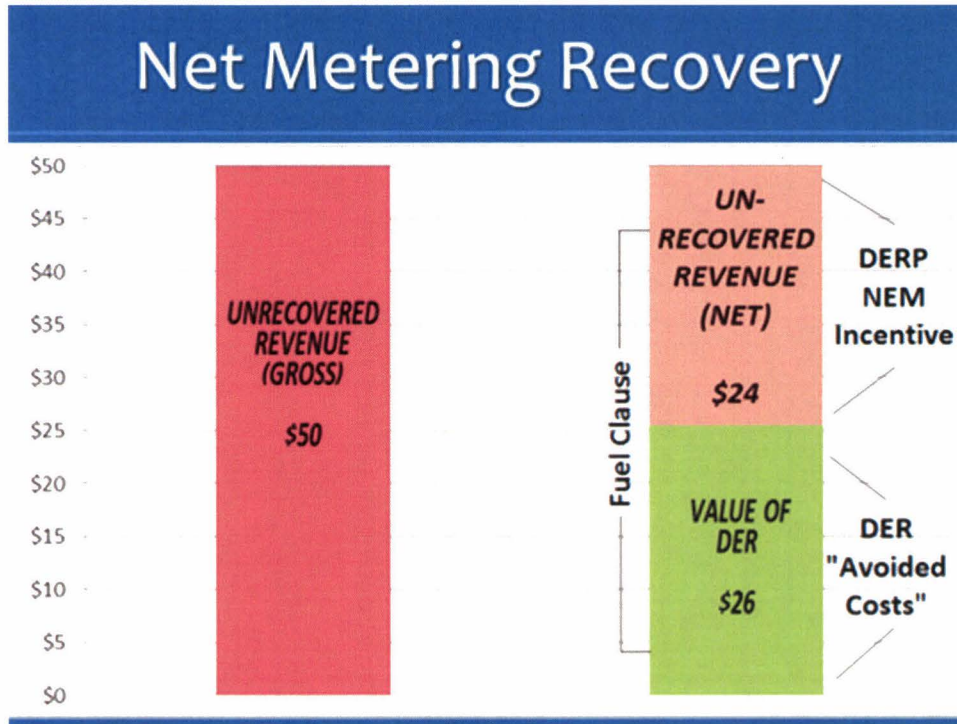
with this mechanism is that it treats the value of every kWh consumed from the utility and every kWh generated by the lessee equally (“1:1 Rate”). This is unfair to the utility since their retail rates are designed to recover fixed and variable costs and NEM customers are only paying a smaller part of these full costs for utility service. To amend this, and still enhance a customer’s incentive to invest in solar generation, a value of DER (“Avoided Cost”) was calculated and used to determine the utility’s appropriate cost recovery needed in order to provide a 1:1 Rate to customers. If there are under-recovered revenues from an NEM customer, the utility will also utilize an incentive (“NEM Incentive”) to continue to provide a 1:1 Rate. If there are over-recovered revenues, a credit will be provided to the NEM customer, therefore negating the need for an NEM incentive. Any credits are banked by the customer for future bill offsets. As such, NEM incentives ensure that NEM customers’ bills are the same as if they were receiving a 1:1 Rate.⁴ These NEM incentives, avoided costs, and other associated program costs, are then ultimately fully recovered by the utility through their annual Fuel Adjustment Clause (“FAC”) filing before the Public Service Commission of South Carolina. The recovery occurs by spreading the NEM incentive costs over the total number of customer accounts the utility serves whether they net meter or not. Figure 2 illustrates the methodology of recovery by the utilities.

FIGURE 2: NET METERING RECOVERY



⁴ Docket No. 2014-246-E, ORS Settlement Testimony of Leigh C. Ford

FIGURE 2 CONTINUED: NET METERING RECOVERY




This hypothetical example illustrates \$50 unrecovered by the utility due to lower kWh sales to an NEM customer. The \$26 value of DER and the \$24 value of the NEM incentive will be recovered through the FAC from the entire customer base, therefore maintaining the 1:1 Rate for the NEM customer.

At the present time, if you are a residential SCE&G customer, you will notice a \$.34 "Renewable Charge" currently on your bill. This charge represents the existing residential subsidization rate currently in place to recover net metering costs from the entire customer base since SCE&G's last FAC. The DER value, or avoided cost, portion is collected through volumetric charges by all customers.

Research Purpose

As previously stated, the ORS was charged with implementing and regulating a Leasing Program for South Carolina. The Program officially launched in August 2015, and now is the appropriate time to conduct a review of the Program's implementation, the lessor application process, Program trends, Program experience, and recommendations concerning the future of the Program. This is important because the ORS is the sole provider of renewable leasing certifications for the state of South Carolina. Without ORS certification, no entity is permitted to lawfully lease renewable electric generation facilities in the state. The ORS has the duty to balance



the state's interest in promoting a market for the provision of renewable electric generation facilities as permitted by Act 236, with an appropriate level of protection for lessees and to ensure fair and accurate marketing practices.

The majority of the raw data contained in this report is from the records contained at the ORS and is under my direct supervision. The information is the most appropriate to use in analyzing our state's current renewable leasing penetration and presence. Other data was obtained from Act 236 and various industry websites and industry publications as cited where necessary.

Program Implementation

The implementation of the Program required several critical steps:

1. Develop an application for lessors to be certified by the ORS to lease renewable electric generation facilities in SC;
2. Establish an approval process to determine if an applicant is fit, willing, and able to conduct business in accordance with Article 23;
3. Maintain a registry of all installed leased facilities; and
4. Receive, compile and investigate customer complaints.

Step 1: Develop Certificate Application

Pursuant to Article 23, an entity must submit an application to the ORS and receive approval and certification to lawfully commence doing business as a lessor of renewable electric generation facilities in South Carolina, excluding any entity lawfully providing retail electric service to the public.⁵

The ORS developed an application to capture the information necessary to determine if an entity is fit, willing, and able to conduct business in accordance with Article 23.⁶ This was accomplished through extensive research of leasing activities in other states and collaborative efforts with leasing companies and electric utility personnel. The resulting application requires the entity to provide documentation supporting its managerial, technical, and financial experience. The application was implemented in August 2015 and can be accessed on the ORS website along with the filing instructions.

⁵ Section 58-27-2620 (A)

⁶ Section 58-27-2620 (C)



Step 2: Establish an Approval Process

Upon receipt of a complete application from a potential lessor, the ORS is responsible for determining whether the applicant will balance South Carolina's interest in promoting a market for renewable electric generation facilities, providing an appropriate level of consumer protections, and ensuring fair and accurate marketing practices in accordance with South Carolina law.⁷

The ORS assembled a diverse team to review applications in the order they are received. This team includes ORS employees with experience in finance, economics, and utility operations to ensure a vast array of perspectives during the approval process. The team reviews the application, analyzes the supporting documentation, and makes a determination.

The review process is usually finalized within thirty days of receiving a complete application. Upon review and approval, the ORS issues a certificate permitting the lessor to market and lease renewable electric generation facilities to lessees in South Carolina.⁸ As of December 15, 2016, thirty-nine lessor applications have been received and thirty-four certificates have been issued. The remaining five applications are completing the review process.

See Figure 3 for a list of lessors approved by the ORS and the number of corresponding leases the companies have executed. A more detailed list can also be found on the ORS website.

⁷ Section 58-27-2620 (B)

⁸ Section 58-27-2620 (C)

FIGURE 3: APPROVED LESSORS AS OF 12/15/2016

Certificate Number	Date Issued	Company Name	Lessor Type	Number of Leases Executed
SL-0001	8/20/15	Sunrun, Inc.	Residential	1,781
SL-0002	9/30/15	Vivint Solar Developer, LLC	Residential	751
SL-0003	10/13/15	Sunnova Energy Corporation	Commercial	0
SL-0004	11/9/15	NRG Residential Solar Solutions, LLC dba NRG Home Solar	Residential	4
SL-0005	11/9/15	Empower Energies, Inc.	Commercial	0
SL-0006	1/14/16	Onyx Development Group, LLC	Commercial	0
SL-0007	2/26/16	Sunstreet Energy Group, LLC	Residential	0
SL-0008	3/7/16	BlueWave SE, LLC	Commercial	0
SL-0009	5/2/16	C2 WM Leasing, LLC	Commercial	0
SL-0011	6/1/16	SoCore 2016 ProjectCo 3	Commercial	0
SL-0012	6/1/16	SoCore 2016 ProjectCo 4	Commercial	0
SL-0013	6/1/16	SoCore 2016 ProjectCo 5	Commercial	0
SL-0014	6/1/16	SoCore 2016 ProjectCo 6	Commercial	0
SL-0015	6/1/16	SoCore 2016 ProjectCo 7	Commercial	0
SL-0016	5/11/16	Heights Solar, LLC	Commercial	2
SL-0017	6/10/16	Oak Leaf Solar XVI, LLC	Commercial	0
SL-0019	8/25/16	Davis Sustainable Energy, LLC	Commercial	0
SL-0025	10/4/16	RockHillPV, LLC	Commercial	0
SL-0023	10/11/16	GRE Fund II Projectco 5, LLC	Commercial	1

FIGURE 3 CONTINUED: APPROVED LESSORS AS OF 12/15/2016

Certificate Number	Date Issued	Company Name	Lessor Type	Number of Leases Executed
SL-0024	10/11/16	GRE Fund II Projectco 6, LLC	Commercial	1
SL-0026	10/11/16	GRE Fund II Projectco 7, LLC	Commercial	1
SL-0035	10/11/16	GRE Fund II Projectco 8, LLC	Commercial	1
SL-0021	10/11/16	GRE Fund II Projectco 2, LLC	Commercial	2
SL-0022	10/11/16	GRE Fund II Projectco 4, LLC	Commercial	1
SL-0036	11/8/16	Live Oak Banking Company	Commercial	0
SL-0027	11/15/16	C2 WM Indian Land Leasing, LLC	Commercial	0
SL-0028	11/15/16	C2 WM Chester Leasing, LLC	Commercial	0
SL-0029	11/15/16	C2 WM Simpsonville Leasing, LLC	Commercial	0
SL-0030	11/15/16	C2 WM Greenwood Leasing, LLC	Commercial	0
SL-0031	11/15/16	C2 WM Lake Wylie Leasing, LLC	Commercial	0
SL-0032	11/15/16	C2 WM Pickens Leasing, LLC	Commercial	0
SL-0033	11/15/16	C2 WM Powdersville Leasing, LLC	Commercial	0
SL-0034	11/15/16	C2 WM Laurens Leasing, LLC	Commercial	0
SL-0038	12/2/16	Live Oak Clean Energy Financing, LLC	Commercial	0

Step 3: Maintain a Registry of Leased Facilities

When a certified lessor completes an installation of a leased renewable electric generation facility in South Carolina, the lessor has up to thirty days to register the facility with the ORS on forms developed and provided by the ORS.⁹ The ORS is required to maintain an aggregate registry of these facilities to be made available to the public and subject to the South Carolina Freedom of Information Act.¹⁰

⁹ Section 58-27-2630 (A)

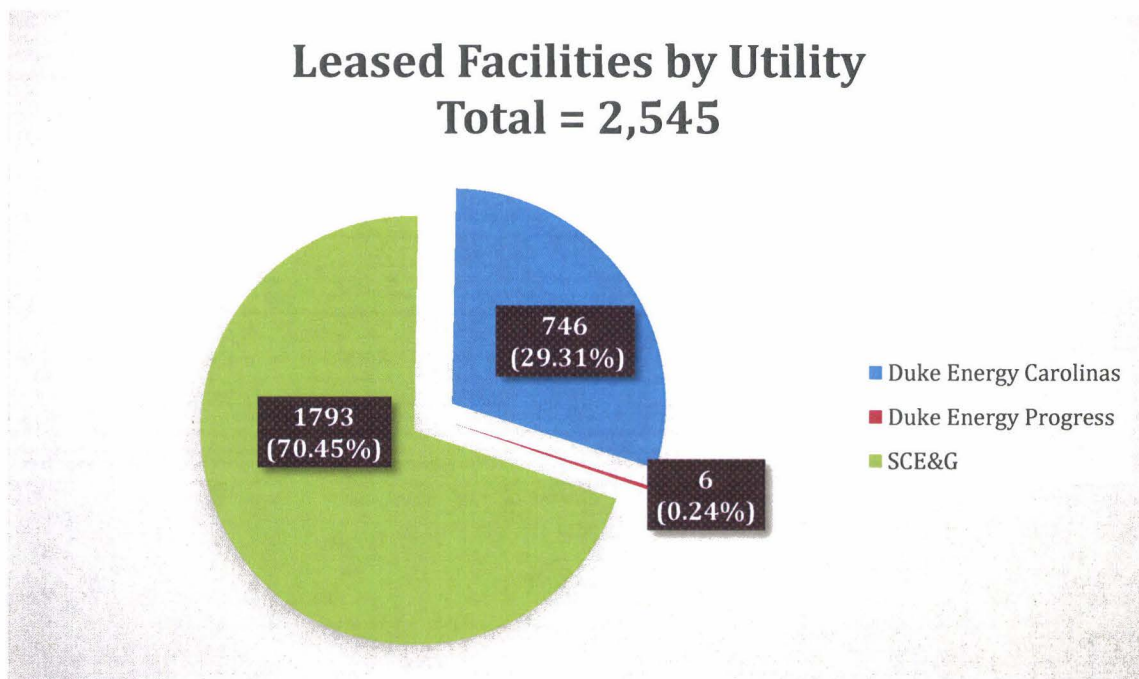
¹⁰ Section 58-27-2630 (B)

Registry Trends

The Registry of Leased Facilities (“Registry”) maintained by the ORS includes a total of 2,545 registered facilities as of December 15, 2016 (See Figure 4). Of this total, 1,793 (70.45%) are registered in South Carolina Electric & Gas Company’s service territory; 746 (29.31%) are in the Duke Energy Carolinas, LLC territory; and 6 (0.24%) are in the Duke Energy Progress, LLC territory.

Residential facilities account for 2,536 (99.65%) of all registered facilities. The remaining 9 (0.35%) are commercial facilities registered in SCE&G’s service territory. The residential market space for leasing is primarily dominated by two solar leasing companies: Vivint Solar Developer, LLC (“Vivint”) and Sunrun, Inc. (“Sunrun”). Together they account for 2,532 (99.49%) of all leased facilities in South Carolina.

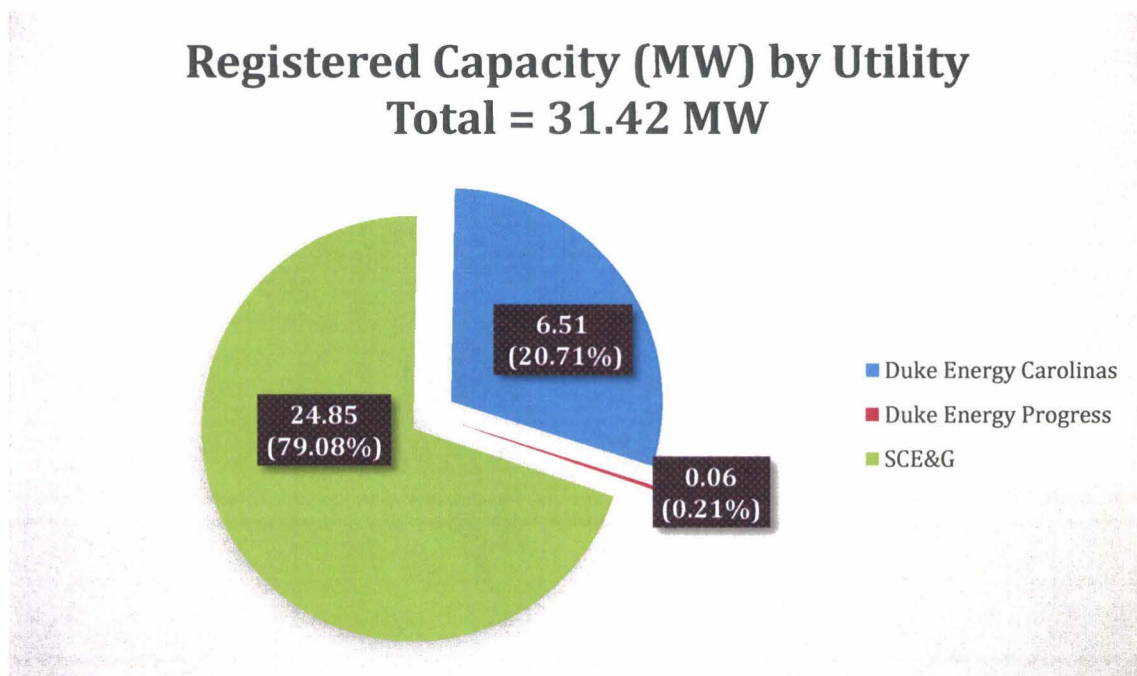
FIGURE 4: LEASED FACILITIES REGISTERED AS OF 12/15/2016



The Registry reflects a total nameplate capacity of approximately 31.42 megawatts (MW) as of December 15, 2016 (See Figure 5). Of this total, 24.85 MW (79.08%) is registered in SCE&G’s service territory, 6.51 MW (20.71%) in DEC’s service territory, and 0.06 MW (0.21%) in DEP’s territory. Residential facilities account for approximately 29.14 MW (93%) of total registered capacity. The remaining 2.28 MW (7%) are commercial facilities. According to the latest 2015 report from GMT

Research, 72% of all residential solar installed in the United States in 2014 was from solar leasing.¹¹

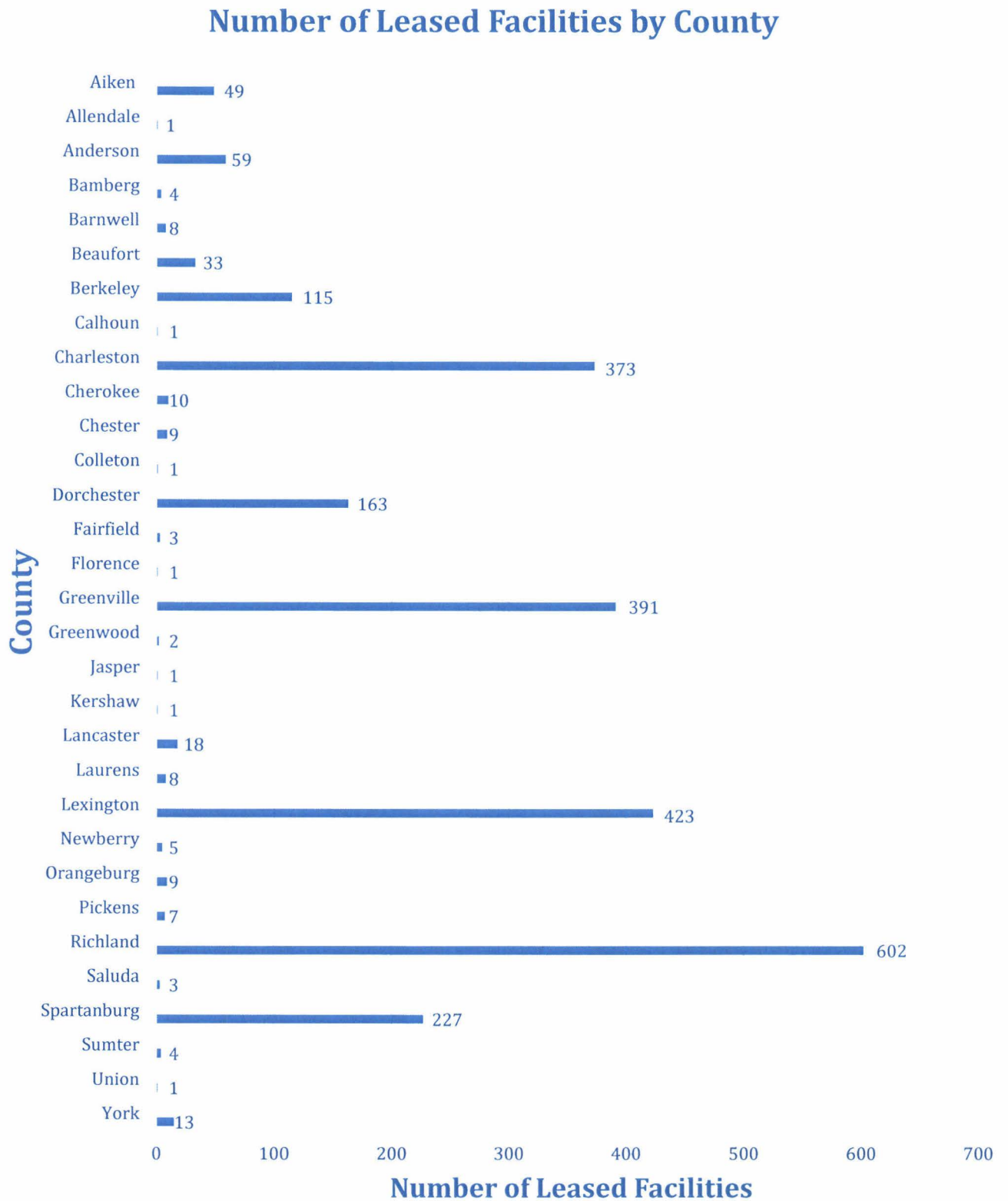
FIGURE 5: REGISTERED CAPACITY BY UTILITY AS OF 12/15/16



Thirty-one South Carolina counties have leased facilities registered with the ORS. The size and population of each county seem to have a direct bearing on the number of leased facilities. Registered facilities tend to be heavily concentrated in the large metropolitan areas of the state such as Richland, Lexington, Greenville, Charleston, Spartanburg, Dorchester, and Berkeley counties. These seven counties account for 2,294 (90%) of all registered facilities. The less populated rural areas tend to experience a much lower level of leasing activity. See Figure 6 for the number of leased facilities by SC county.

¹¹ <http://www.greentechmedia.com/research/report/us-residential-solar-financing-2015-2020>

FIGURE 6: LEASED FACILITIES BY SC COUNTY AS OF 12/15/2016





Step 4: Investigate Complaints

The ORS has the responsibility to receive, compile and investigate customer complaints arising under Article 23 and attempt to negotiate consent agreements or other settlements resolving alleged violations.¹² The investigatory powers provided to the ORS in Sections 58-4-50 and 58-4-55 regarding public utilities also apply.¹³

Since inception, the ORS has heard directly from lessees and lessors regarding many differing aspects of the Program. General inquiries, concerns, and complaints via oral or written communication were addressed by the ORS personnel, and a satisfactory resolution was reached.

The majority of contacts from lessors related to the application process and interconnection procedures. The ORS received mostly general inquiries seeking clarification regarding specific information to submit with the application, timeframes to be expected during the approval process, the interconnection queue and processing times, and utility incentives offered. The ORS did not receive any formal disputes or complaints from lessors, nor did the ORS exercise any adverse actions such as filing a petition for revocation of a lessor certificate with the Administrative Law Court¹⁴ or levying any civil penalties to lessors.¹⁵

Lessees contacted the ORS with general inquiries and a minimal number of informal complaints. The inquiries were predominantly from customers seeking education regarding solar leasing such as lease contracts, terms, net metering, and confirmation that Lessors were properly certified. Through December 31, 2016, the eleven complaints received about Lessors pertained to deceptive marketing practices, customer service, rebate incentives, facility sizing, and interconnection. All of the complaints were investigated by the ORS and resolved in a timely manner.

Recommendations

The Lease of Renewable Electric Generation Facilities Program began in August 2015 and the ORS gained valuable experience through the development and administration of the Program. The processes developed for lessor certification, facility registration, and complaint resolution have proved to be effective and efficient.

¹² Section 58-27-2620 (E)

¹³ Section 58-27-2620 (F)

¹⁴ Section 58-27-2620 (G)

¹⁵ Section 58-27-2620 (H)

However, the Program is still in its infancy stage compared to many other states around the country. Several states have a decade or more of experience with solar leasing products. The ORS can learn a tremendous amount from being a late adopter by recognizing pitfalls, trends, and problems that other states have already experienced. Based on the research I have done, there are two main areas in the solar leasing market that have garnered a significant amount of attention from regulators, consumers, and the electric utilities. As the ORS Program progresses I recommend monitoring the following two areas:

- 1- Complaints
- 2- Net Energy Metering


Complaints

As previously stated, the ORS has received eleven informal complaints as of December 31, 2016. Informal is defined as received at the ORS, but never escalated to a level of requiring adjudication by the court system or the Public Service Commission of South Carolina. These eleven account for .40% of all leases contained in our Registry at the time. This is a very minimal percentage considering the amount of solar systems installed in just over a year's time and the ORS can only remain optimistic that this proportion continues. Figure 7 below summarizes the complaints the ORS has received through December 31, 2016.

FIGURE 7: COMPLAINTS RECEIVED THROUGH 12/31/16

Complaint Type	#
Deceptive Marketing Practices	4
Customer Service	3
Rebate Incentives	2
System Sizing	1
Interconnection	1

The last four complaint types listed were the most straightforward and easiest to resolve in the least amount of time. They all had a common theme of basic misunderstandings related to transactional administrative processes being refined



by either the utility or lessor. This was mainly due to the novelty of Act 236 and solar leasing in South Carolina. The ORS has not received any more of these complaint types since year ending 2016. However, in January 2017, the ORS received three additional complaints related to the first complaint type on the list, deceptive marketing practices. That almost matches the total received since the Program's inception in just one month. This causes concern and has the potential to be the most troubling issue going forward.

Although the advent of generous government and utility subsidies made solar leasing more attainable for consumers, it has also exposed more and more homeowners to a host of problems resulting from shady business practices by many solar companies. These deceptive marketing practices come in many forms such as exaggerated energy savings and failing to disclose the full cost of a solar system. Others include aggressive salespeople who misrepresent themselves as partners with a utility or government program, high pressure sales tactics, non-disclosure of specific contract terms, and preying on the elderly and uneducated of society.¹⁶

While most licensed solar installers do their jobs well, and customers are satisfied with the results, the recent number of complaints to the California Contractors State License Board about deceptive solar practices rose sharply. From January 1, 2015 through May 1, 2016 there were 535 complaints received compared to only 59 filed in 2010.¹⁷


In 2014, Arizona and Texas House Representatives sent a letter to the Consumer Financial Protection Bureau ("CFPB") to look into solar leasing practices and twelve other House members implored the Federal Trade Commission to investigate deceptive sales tactics as well.¹⁸ "As a very new industry with a limited track record and little regulatory oversight, the solar leasing market may pose a considerable risk to the increasingly large numbers of American consumers that commit to the leasing product (not to mention the American taxpayer, who heavily subsidizes each rooftop solar project)," reads one of the letters. The letters claim that multiple customers have signed zero-down solar leases without fully understanding the terms of their 20- to 30-year lease commitment, and are now having trouble selling their homes. They also reference class-action lawsuits brought against solar companies in California and Louisiana.¹⁹

¹⁶ <http://dailycaller.com/2015/06/19/consumer-complaints-reveal-solar-companies-ignoring-ethics-code>

¹⁷ <http://www.cslb.ca.gov/Newsletter/2016-Summer/deceptive%20solar.asp>

¹⁸ <http://www.forbes.com/sites/jamesconca/2015/01/17/rooftop-solar-shines-light-on-bad-business-practices/#4ea3a640476b>

¹⁹ <https://www.greentechmedia.com/articles/read/Are-Rooftop-Solar-Companies-Doing-Enough-to-Protect-Consumers>



In 2015, House Democrats have also sounded an alarm. In a recent joint letter to the CFPB, they warned that “easy financial terms, increased demand and a rapidly expanding industry” are the same factors that led to the subprime mortgage crisis.²⁰

Solar customers in Louisiana have also experienced problems. One of the biggest solar companies in the state has numerous complaints posted on its Better Business Bureau profile. One consumer reported waiting over a year for his solar panel installation, despite having given the company a deposit at the outset. Yet another consumer reported that after one year of using solar panels, his utility bill had not measurably decreased. Additionally, WDSU News in New Orleans reported in February 2014 that some consumers had filed a class action lawsuit alleging that the company had deceived consumers by intentionally overstating energy cost savings, failing to install the solar equipment in a timely manner, and violating state laws which require licenses for solar panel installers. The Louisiana Attorney General’s Office got involved to investigate the allegations.²¹

The complaints go on and on across the country. Fortunately, I believe the ORS has the privilege of thwarting their proliferation in South Carolina through the certification process and maintaining professional relationships with the leasing companies. Considering that Vivint and Sunrun are two of the largest solar leasing companies in the country and are operating in our state, the ORS will move forward with a watchful eye and monitor complaint trends in order to protect our citizens from deceptive marketing practices.


Net Energy Metering

I explained earlier about NEM, DER value, and the incentives offered in order to maintain a 1:1 Rate for solar customers. Without this arrangement DER systems pose a challenge to electric utilities’ existing business model. Utilities are in the business of generating electricity and selling it to customers for a profit and had to determine how to make money selling energy to consumers who can produce it themselves. Most owners of DER systems still rely on the grid to receive electricity from utilities at night or when their systems cannot generate sufficient power²² leading many electric utilities to state that owners of DER systems do not pay the full cost of service to use the grid. This shifts their share of the cost (“cost shifting”) on to customers

²⁰ <https://www.truthinadvertising.org/lawmakers-raise-questions-deceptive-marketing-solar-industry/>

²¹ <http://www.theamericanconsumer.org/2014/09/buyer-beware-complaints-from-rooftops/>

²² <http://www.azenergyfuture.com/net-metering/>



without DER systems,²³ as is the case with current NEM customers and DER programs.

However, service under this current arrangement will close to new participants on January 1, 2021. Beyond that, NEM service will expire for those participants on January 1, 2026. At that time, NEM policies, which amount to a subsidy, may be too expensive and unfair as more people adopt solar generation. This is important considering that all of the residential leases in the ORS Registry receive NEM service. In 2015 alone, twenty-seven states instituted regulatory or legislative action on net metering policies and more have done the same since.


As an extreme example, the Nevada Public Utilities Commission voted in December 2015 to cut net metering payments and to raise fixed fees on solar customers. Effective January 1, 2016, Nevada's state utility reduced the amount of money solar customers are paid for the energy they generate from 9.2 cents per kWh to 2.6 cents per kWh in three-year increments by 2028. The utility also raised the fee charged to solar customers to make up for the lower revenue received from them. Fixed fees for solar customers will rise every three years from the current rate of \$12.75 per month to \$38.51 per month by 2028. Current charges are \$8.72 per month in fixed metered fees for non-solar customers. This policy reversal caused severe damage to the basic economics of DER systems in the state. Three solar industry leaders (SolarCity, Vivint and Sunrun) closed their operations in Nevada. SolarCity cut more than 550 jobs in the state as a result of the change in policy, and some solar owners have filed a class action lawsuit against the utility seeking damages for erasing the benefits of solar programs and rebates. Even more damaging is that these rate changes apply to not only new customers but to the approximately 17,000 existing solar customers, many of whom have signed long-term leasing contracts that are now uneconomic.²⁴

Arizona utilities rebelled against what they see as an unsustainable cost shifting to non-DER owners caused by NEM. Last month, Arizona regulators concluded a proceeding on the value of DER by ending NEM and introduced a replacement rate design and made solar customers their own separate rate class. When new rates are imposed it will not be as favorable to those DER owners, but it won't be the worst case either. They anticipate an average reduction of 50% in the compensation for DER generation from \$.122/kWh to \$.06/kWh.²⁵ That equates to approximately \$62 per month for an average 1,000 kWh consumer.

²³ <http://www.bizjournals.com/phoenix/blog/energy-inc/2013/11/aps-solar-advocates-battle-for-net.html?page=all>

²⁴ <http://climatenexus.org/net-metering-fight-understanding-latest-issue-nation%E2%80%99s-rapidly-changing-electricity-market>

²⁵ <http://www.utilitydive.com/news/the-lurking-surprise-for-solar-in-arizonas-recent-ruling-to-end-net->



Hawaii closed its NEM program to new customers in October 2015 because of the extraordinary high levels of DER in the state. They are transitioning to a market-based structure for DER and an ambitious commitment to meet 100% renewable generation by 2050. The good news for existing NEM customers is that they will not be affected.²⁶ Different programs will be developed for new DER generators and only time will tell just how beneficial or detrimental they will be for new customers.

So what happens to all of the South Carolina NEM customers once our current programs expire on January 1, 2026? That is only eight years away and most leases in South Carolina are only one or two years into a twenty year lease term. Do IOUs implement minimal billing, demand charges, time-of-use rates or higher basic facility charges? Unfortunately, we can only speculate due to the newness of DER in our state. Recommending sweeping changes in current rate structures is premature given the limited amount of data concerning DER adoption (scale, magnitude, value, etc.) available at the present time. Cost shifting and rate designs will evolve as utility avoided cost data, installation cost and capacity data, customer usage patterns change, and benefits and costs of DERs change in the future.²⁷

Conclusion

To date, thirty-four certifications have been issued, 2,545 leased solar facilities with a nameplate capacity of 31.42 MW have been registered, and eleven complaints have been investigated and resolved. The ORS continues to cultivate professional relationships with lessors and interconnecting utilities in order to promote the establishment of a reliable, efficient, and diversified portfolio of distributed energy resources for South Carolina.

It is recommended that the Program continue as defined by Article 23. The processes and procedures enacted thus far will ensure the essential vetting of potential lessors, provide consumer protection for lessees, and enhance the growth of the renewable energy industry in South Carolina. The ORS will explore the possible changes that may be warranted in the future, and make such recommendations as may be appropriate when data becomes available.

[meteri/433555/](#)

²⁶ <https://www.greentechmedia.com/articles/read/hawaii-regulators-shutdown-hecos-net-metering-program>

²⁷ <http://www.regulatorystaff.sc.gov/electric/industryinfo/Documents/Act%20236%20Cost%20Shifting%20Report>

Attachments

Attachment A: Definitions

Avoided Costs: These are costs that a utility avoids by purchasing power from an independent producer rather than generating power themselves, purchasing power from another source or constructing new power plants.

Biomass: Organic nonfossil material of biological origin constituting a renewable energy source.

Capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions.

Demand Charge: The sum to be paid by a large electricity consumer for its peak usage level.

Demand-side management (DSM): A utility action or programs that reduces or curtails end-use equipment or processes. DSM is often used in order to reduce customer load during peak demand and/or in times of supply constraint.


Distributed Energy Resources (DER): smaller power sources that can be aggregated to provide power necessary to meet regular demand. As the electricity grid continues to modernize, DER such as storage and advanced renewable technologies can help facilitate the transition to a smarter grid.

Energy efficiency, Electricity: Refers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatthours), often without explicit consideration for the timing of program-induced savings.

Fuel Adjustment Clause (FAC): A clause in the rate schedule that provides for adjustment of the amount of a bill as the cost of fuel varies from a specified base amount per unit. The specified base amount is determined when rates are approved.

Grid: The layout of an electrical distribution system.

Interconnection (Electric utility): The linkage of transmission lines between two utility, enabling power to be moved in either direction. Interconnections allow the utilities to help contain costs while enhancing system reliability.



Investor-owned utility (IOU): A privately-owned electric utility whose stock is publicly traded. It is rate regulated and authorized to achieve an allowed rate of return

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 kilowatt (1,000watts) of power expended for 1 hour. One kWh is equivalent to 3,412 Btu.

Megawatt (MW): One million watts of electricity.

Megawatthour (MWh): One thousand kilowatt-hours or 1million watt-hours

Nameplate Capacity (installed): The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.

Net Energy Metering (NEM): a system in which solar panels or other renewable energy generators are connected to a public-utility power grid and surplus power is transferred onto the grid, allowing customers to offset the cost of power drawn from the utility.

Solar energy: The radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity.

Time-of-Use Rates: Electricity prices that vary depending on the time periods in which the energy is consumed. In a time-of-use rate structure, higher prices are charged during utility peak-load times.

Value of DER: a rate design policy that gives customers with renewable installations credit for the electricity generated by a photovoltaic renewable system. Utility customers with distributed PV panels on their homes or businesses can give power to and take power from the grid.

Attachment B: Act 236

http://www.scstatehouse.gov/sess120_2013-2014/bills/1189.htm

South Carolina General Assembly
120th Session, 2013-2014

A236, R241, S1189

STATUS INFORMATION

General Bill

Sponsors: Senators Gregory, Reese, McElveen, Hembree, Hutto, Lourie, Campsen, Cleary, Allen, Shealy, O'Dell, Campbell, Cromer, Hayes, Verdin, Sheheen, L. Martin, Kimpson, Scott and Alexander

Document Path: I:\s-jud\ills\gregory\jud0107.hla.docx

Introduced in the Senate on April 2, 2014

Introduced in the House on April 30, 2014

Last Amended on May 21, 2014

Passed by the General Assembly on May 28, 2014

Governor's Action: June 2, 2014, Signed

Summary: Distributed Energy Resource Program Act

HISTORY OF LEGISLATIVE ACTIONS

Date	Body	Action Description with journal page number
4/2/2014	Senate	Introduced and read first time (Senate Journal-page 4)
4/2/2014	Senate	Referred to Committee on Judiciary (Senate Journal-page 4)
4/2/2014	Senate	Polled out of committee Judiciary (Senate Journal-page 9)
4/2/2014	Senate	Committee report: Majority favorable, minority unfavorable Judiciary (Senate Journal-page 9)
4/15/2014	Senate	Amended (Senate Journal-page 55)
4/16/2014		Scrivener's error corrected
4/29/2014	Senate	Read second time (Senate Journal-page 35)
4/29/2014	Senate	Roll call Ayes-37 Nays-0 (Senate Journal-page 35)
4/30/2014	Senate	Read third time and sent to House (Senate Journal-page 36)
4/30/2014	House	Introduced and read first time (House Journal-page 88)
4/30/2014	House	Referred to Committee on Labor, Commerce and Industry (House Journal-page 88)
5/15/2014	House	Committee report: Favorable with amendment Labor, Commerce and Industry (House Journal-page 6)
5/19/2014		Scrivener's error corrected
5/21/2014	House	Amended (House Journal-page 110)
5/21/2014	House	Read second time (House Journal-page 132)
5/21/2014	House	Roll call Yeas-105 Nays-0 (House Journal-page 134)

5/22/2014 House Read third time and returned to Senate with amendments ([House Journal-page 5](#))
5/22/2014 House Roll call Yeas-86 Nays-0 ([House Journal-page 6](#))
5/28/2014 Senate Concurred in House amendment and enrolled ([Senate Journal-page 102](#))
5/28/2014 Senate Roll call Ayes-42 Nays-0 ([Senate Journal-page 102](#))
5/29/2014 Ratified R 241
6/2/2014 Signed By Governor
6/13/2014 Effective date 06/02/14
6/16/2014 Act No. 236

VERSIONS OF THIS BILL

[4/2/2014](#)

[4/2/2014-A](#)

[4/15/2014](#)

[4/16/2014](#)


[5/15/2014](#)

[5/19/2014](#)

[5/21/2014](#)

(A236, R241, S1189)

AN ACT TO AMEND SECTION 58-27-865, AS AMENDED, CODE OF LAWS OF SOUTH CAROLINA, 1976, RELATING TO THE DEFINITION OF “FUEL COST” AND RELATED PROVISIONS IN REGARD TO ELECTRIC UTILITY RATE DETERMINATIONS, SO AS TO REVISE THE DEFINITION AND FURTHER PROVIDE FOR RELATED PROVISIONS; BY ADDING CHAPTER 39 TO TITLE 58 SO AS TO PROVIDE FOR A SOUTH CAROLINA DISTRIBUTED ENERGY RESOURCE PROGRAM, TO DEFINE CERTAIN TERMS, TO SET GOALS FOR THE PROGRAM, AND TO PROVIDE FOR THE PROCESS AND IMPLEMENTATION OF THE PROGRAM, INCLUDING THE APPLICATION AND APPROVAL PROCESS FOR THE PROGRAM AND COST RECOVERY; BY ADDING CHAPTER 40 TO TITLE 58 SO AS TO PROVIDE FOR A NET ENERGY METERING PROGRAM, TO DEFINE CERTAIN TERMS, TO PROVIDE FOR THE REQUIREMENTS FOR THE NET ENERGY METERING PROGRAM, INCLUDING COSTS AND THE RESPONSIBILITIES OF THE PUBLIC SERVICE COMMISSION AND THE OFFICE OF REGULATORY STAFF PURSUANT TO THIS PROGRAM; BY ADDING ARTICLE 23 TO CHAPTER 27, TITLE 58 SO AS TO PROVIDE FOR THE LEASE OF RENEWABLE ELECTRIC GENERATION FACILITIES PROGRAM, TO DEFINE CERTAIN TERMS, TO PROVIDE FOR THE REQUIREMENTS OF THE LEASE PROGRAM, INCLUDING AN APPLICATION PROCESS AND REGISTRATION WITH THE OFFICE OF REGULATORY STAFF AND PENALTIES FOR VIOLATIONS OF THE LEASE PROGRAM; BY ADDING SECTION 58-27-1050 SO AS TO PROVIDE THAT THE OFFICE OF REGULATORY STAFF SHALL INVESTIGATE AND REPORT TO THE PUBLIC SERVICE COMMISSION ON FIXED COSTS, FIXED CHARGES, AND THE EXTENT OF COST SHIFTING THAT IS ATTRIBUTABLE TO DISTRIBUTED ENERGY RESOURCES WITHIN CURRENT UTILITY COST OF SERVICE RATEMAKING METHODOLOGIES, COST



ALLOCATIONS, AND RATE DESIGNS; BY ADDING SECTION 58-27-460 SO AS TO PROVIDE THAT THE PUBLIC SERVICE COMMISSION SHALL PROMULGATE STANDARDS FOR INTERCONNECTION OF RENEWABLE ENERGY FACILITIES AND OTHER NONUTILITY-OWNED GENERATION WITH A GENERATION CAPACITY OF TWO THOUSAND KILOWATTS OR LESS TO AN ELECTRICAL UTILITY'S DISTRIBUTION SYSTEM AND TO PROVIDE THAT NO CUSTOMER-GENERATOR OR CUSTOMER-GENERATOR LESSEE SHALL CONNECT OR OPERATE AN ELECTRIC GENERATION UNIT IN PARALLEL PHASE AND SYNCHRONIZATION WITH ANY ELECTRICAL UTILITY WITHOUT WRITTEN APPROVAL BY THE ELECTRICAL UTILITY THAT ALL OF THE COMMISSION'S REQUIREMENTS HAVE BEEN MET; TO PROVIDE THAT EACH DISTRIBUTION ELECTRIC COOPERATIVE BOARD SHALL CONSIDER CERTAIN GENERAL OBJECTIVES AND METHODOLOGY IN ADOPTING A NET ENERGY METERING POLICY, AND TO PROVIDE THAT EACH DISTRIBUTION ELECTRIC COOPERATIVE SHALL ADOPT A NET ENERGY METERING POLICY AND SHALL REPORT THEIR POLICY TO THE OFFICE OF REGULATORY STAFF WITHIN ONE YEAR; TO PROVIDE THAT EACH ELECTRIC COOPERATIVE SHALL INVESTIGATE THE RELATIONSHIP BETWEEN FIXED COSTS, FIXED CHARGES, AND THE EXTENT OF COST SHIFTING THAT IS ATTRIBUTABLE TO DISTRIBUTED ENERGY RESOURCES WITHIN CURRENT COST OF SERVICE RATEMAKING METHODOLOGIES, COST ALLOCATIONS, AND RATE DESIGNS, WITH A FOCUS ON THE IMPLICATIONS DISTRIBUTED ENERGY RESOURCES COULD HAVE FOR THEIR BUSINESS MODELS IN THE FUTURE; TO PROVIDE THAT IF THE APPLICATION OF THE PROVISIONS OF THIS ACT TO ANY WHOLESALE ELECTRICAL CONTRACT EXISTING ON THE DATE OF ITS ADOPTION IS DETERMINED TO IMPAIR UNLAWFULLY ANY TERM OF SUCH CONTRACT OR TO ADD MATERIAL COSTS TO EITHER PARTY, THEN THAT CONTRACT IS EXEMPT FROM THE PROVISIONS OF THIS ACT UNDER CERTAIN CONDITIONS; AND TO PROVIDE HOW CERTAIN PROVISIONS OF THE ACT MUST BE CONSTRUED.

Be it enacted by the General Assembly of the State of South Carolina:

“Fuel costs” further defined

SECTION 1. Section 58-27-865(A) of the 1976 Code, as last amended by Act 16 of 2007, is further amended to read:

“Section 58-27-865. (A)(1) The term ‘fuel cost’ as used in this section includes the cost of fuel, cost of fuel transportation, and fuel costs related to purchased power. ‘Fuel cost’ also shall include the following variable environmental costs: (a) the cost of ammonia, lime, limestone, urea, dibasic acid and catalysts consumed in reducing or treating emissions, and (b) the cost of emission allowances, as used, including allowance for SO₂, NO_x, mercury, and particulates. Upon application of the utility, and after a hearing at which all interested parties may appear and present evidence, the commission may, if it determines such action to be just and reasonable, allow the variable costs of other environmental reagents, other environmental allowances or emissions-related taxes to be recovered as a component of fuel costs, but only to the extent these variable environmental costs are required to be incurred in relation to the consumption of fuel and the air emissions caused thereby. Alternatively, the commission may decide that the costs related to these other variable environmental costs may only be recovered through base rates established

under Sections 58-27-860 and 58-27-870. All variable environmental costs included in fuel costs shall be recovered from each class of customers as a separate environmental component of the overall fuel factor. The specific environmental component for each class of customers shall be determined by allocating such variable environmental costs among customer classes based on the utility's South Carolina firm peak demand data from the prior year. Fuel costs must be reduced by the net proceeds of any sales of emission allowances by the utility. If capacity costs are permitted to be recovered through the fuel factor, such costs shall be allocated and recovered from customers under a separate capacity component of the overall fuel factor based on the same method that is used by the utility to allocate and recover variable environmental costs. The incremental and avoided costs of distributed energy resource programs and net metering as authorized and approved under Chapters 39 and 40, Title 58 shall be allocated and recovered from customers under a separate distributed energy component of the overall fuel factor that shall be allocated and recovered based on the same method that is used by the utility to allocate and recover variable environmental costs.

(2) In order to clarify the intent of this section, 'fuel costs related to purchased power', as used in subsection (A)(1) shall include:

(a) costs of 'firm generation capacity purchases', which are defined as purchases made to cure a capacity deficiency or to maintain adequate reserve levels; costs of firm generation capacity purchases include the total delivered costs of firm generation capacity purchased and shall exclude generation capacity reservation charges, generation capacity option charges, and any other capacity charges;

(b) the total delivered cost of economy purchases of electric power including, but not limited to, transmission charges; 'economy purchases' are defined as purchases made to displace higher cost generation, at a price which is less than the purchasing utility's avoided variable costs for the generation of an equivalent quantity of electric power; and

(c) avoided costs under the Public Utility Regulatory Policy Act of 1978, also known as PURPA."

Distributed energy resource program

SECTION 2. Title 58 of the 1976 Code is amended by adding:

"CHAPTER 39

South Carolina Distributed Energy Resource Program

Section 58-39-110. This chapter may be cited as the 'South Carolina Distributed Energy Resource Act'. The goals of this chapter are to promote the establishment of a reliable, efficient, and diversified portfolio of distributed energy resources for the State.

Section 58-39-120. As used in this chapter:

(A) 'AC' means alternating current, as measured at the point of interconnection of the renewable energy facility to the interconnecting electrical utility's transmission or distribution system.

(B) 'Avoided costs' means payments for purchases of electricity made according to an electrical utility's most recently approved or established avoided cost rates in this State or rates negotiated pursuant to PURPA, in the year the costs are incurred, for purchases of electricity from qualifying facilities pursuant to Section 210 of the Public Utility Regulatory Policies Act, said costs to be calculated as set forth in Section 58-39-140(A)(1).

(C) 'Distributed energy resource' (DER) means demand- and supply-side resources that can be deployed throughout the system of an electrical utility to meet the energy and reliability needs of the customers served by that system, including, but not limited to, renewable energy facilities,

managed loads (including electric vehicle charging), energy storage, and other measures necessary to incorporate renewable generation resources, including load management and ancillary services, such as reserves, voltage control, and reactive power, and black start capabilities.

(D) ‘Electrical utility’ shall be defined as in Section 58-27-10 of the 1976 Code, provided, however, that electrical utilities serving less than 100,000 customer accounts shall be exempt from the provisions of this chapter.

(E) ‘Renewable energy facility’ means a facility that generates electric power by the use of a renewable generation resource that was placed in service for use by or to provide power to an electrical utility after January 1, 2014. A ‘renewable energy facility’ also shall mean any incremental capacity installed after January 1, 2014, that delivers energy from a renewable generation resource.

(F) ‘Renewable generation resource’ means solar photovoltaic and solar thermal resources, wind resources, low-impact hydroelectric resources, geothermal resources, tidal and wave energy resources, recycling resources, hydrogen fuel derived from renewable resources, combined heat and power derived from renewable resources, and biomass resources.

Section 58-39-130. The purpose of this section is to establish the ‘distributed energy resource program’ for this State. To accomplish the goals of this chapter:

(A) An electrical utility may apply to the Public Service Commission for approval to participate in the distributed energy resource program. After conducting a hearing on the application, the commission may approve such application if the applicant demonstrates that the program will further the goals of this chapter as set forth in Section 58-39-110.

(1) The application shall, at a minimum, include the following information:

(a) a statement of the specific goals to be addressed by the program and the benefits to be achieved from its implementation;

(b) a description of the principal elements of the program and a statement of the benefits to be achieved from the implementation of each of those elements;

(c) a description of the electrical utility’s planned actions to implement the program and the anticipated timing of those actions;

(d) where relevant, the locational benefits and costs of proposed distributed energy resources proposed to be located on the distribution and transmission system, including, but not limited to, reductions or increases in local generation capacity needs, and avoided or increased investments in distribution infrastructure;

(e) any proposed customer programs and changes in tariffs, or other mechanisms that support the prudent, efficient, and reliable deployment of cost-effective distributed energy resources and the goals of the distributed energy resource program as defined in Section 58-39-110, including, but not limited to, programs intended to support access to distributed energy resources for tax-exempt entities;

(f) additional utility expenditures necessary to integrate cost-effective distributed energy resources into distribution and transmission planning;

(g) where relevant, a description and evaluation of any barriers to the deployment of distributed energy resources as envisioned in the plan, including, but not limited to, safety standards related to technology or operation of the distribution circuit in a manner that ensures reliable service;

(h) a schedule of the projected incremental costs anticipated to implement the electrical utility’s distributed energy resource program for each year of the subject period; and

(i) an estimate of costs to be incurred pursuant to the distributed energy resource program as defined in Section 58-39-130 and an estimate of those costs to be recovered pursuant to Sections 58-27-865 and 58-39-140 to fully recover the projected costs of the program.

(2) Upon approval of its application, an electrical utility shall be permitted to recover its costs related to the approved distributed energy resource program pursuant to Sections 58-27-865 and 58-39-140 to the extent those costs are reasonably and prudently incurred to implement an approved program. Approval of a program, measure, or investment shall constitute a finding by the commission that it is just, reasonable, and prudent for the utility to implement the program, measure or investment as approved until such time as the commission orders otherwise.

(3) The Office of Regulatory Staff, an electrical utility, or any other interested party may file a petition for amendment of a distributed energy resource program at any time. The commission may hold a hearing on such petition if it determines that the extent of the proposed changes warrant a hearing. The petition for amendment shall include the information set forth in Section 58-39-130(A)(1) to the extent that such information is relevant to the amendments proposed.

(4) The effect of a decision to amend or terminate an approved distributed energy resource program, investment, or measure shall be prospective only and costs incurred prior to that decision shall be recoverable.

(5) An electrical utility may invest in distributed energy resources or programs outside of an approved distributed energy resource program under this chapter. The utility may seek recovery of the costs associated with such programs and resources under the ratemaking principles and procedures generally applicable to electrical utilities outside of this chapter. The fact that such resources are not part of an approved distributed energy resource program shall create no negative inference concerning their recoverability under other ratemaking provisions.

(6) An electrical utility may file an application to participate in a distributed energy resource program at any time.

(B) An electrical utility may implement a distributed energy resource program by one or more of the following:

(1) investment in distributed energy resources located in South Carolina as defined in Section 58-39-120;

(2) purchase of power from renewable energy facilities located in South Carolina;

(3) investment in technologies necessary to mitigate the effects of variable renewable energy generation through provision of ancillary services, including, but not limited to, reserves, voltage control, and reactive power in South Carolina; and

(4) investment in technologies that enhance load management including, but not limited to, electric vehicle charging and energy storage.

(C) Any distributed energy resource program proposed by an electrical utility shall, at a minimum, result in development by 2021 of renewable energy facilities located in South Carolina in an aggregated amount of installed nameplate generation capacity equal to at least two percent of the previous five-year average of the electrical utility's South Carolina retail peak demand. All investments and procurements proposed by an electrical utility under its program shall be reviewed by the commission before the program is implemented to determine whether the investments or procurements are reasonable and prudent in light of the nature of the resources to be acquired, the goals of the utility's distributed energy resources program and alternatives available in the market. In the proposed distributed energy resource program, the electrical utility shall:

(1) submit a plan to invest in or procure power from renewable energy facilities located in South Carolina, each with a nameplate capacity that is greater than one thousand kilowatts (1,000 kW AC) but no greater than ten thousand kilowatts (10,000 kW AC) in an aggregated amount of installed nameplate generation capacity equal to one percent of the electrical utility's previous five-year average of the electrical utility's South Carolina retail peak demand.

(2) establish a program, to be implemented no later than one year from the initial approval of a distributed energy resource program, to encourage customers of the electrical utility to purchase or lease renewable energy facilities, each no greater than one thousand kilowatts (1,000 kW AC) in nameplate capacity in an aggregated amount of installed nameplate generation capacity

equal to one percent of the electrical utility's previous five-year average of the electrical utility's South Carolina retail peak demand with no less than twenty-five percent of the capacity being from renewable energy facilities each no greater than twenty kilowatts (20 kW AC) in nameplate capacity. Said program shall be implemented according to the following options:

(a) an incentive to encourage residential customers of the electrical utility to purchase or lease renewable energy facilities in order to become an eligible customer-generator, as defined in Section 58-40-10.

(b) an incentive to encourage customers of the electrical utility to purchase or lease renewable energy facilities, each no greater than one thousand kilowatts (1000 kW AC) in nameplate capacity, which are intended primarily to offset part or all of an electrical utility customer's own electrical energy requirements.

(3) establish a program, to be implemented no later than one year from the initial approval of a distributed energy resource program, to support access to distributed energy resources for South Carolina entities holding tax-exempt status under the Internal Revenue Code and governmental entities and instrumentalities.

(D) Upon satisfaction of the minimum aggregate generation capacity targets specified in subsection (C), the electrical utility may invest in renewable energy facilities located in South Carolina, each with a nameplate capacity that is less than ten thousand kilowatts (10,000 kW AC) and greater than one thousand kilowatts (1,000 kW AC), with a cumulative installed nameplate generation capacity equal to one percent of the previous five-year average of the electrical utility's South Carolina retail peak demand.

(E) If the application of the provisions of this chapter to any wholesale electrical contract executed on or before the effective date of this act is determined to impair unlawfully any term of such contract or to add material costs to either party, then that contract will be exempt from the terms of this chapter to the extent necessary to cure such impairment or to avoid the imposition of additional material costs.

Section 58-39-140. (A) For purposes of this section, 'incremental costs' means all reasonable and prudent costs incurred by an electrical utility to implement a distributed energy resource program pursuant to the provisions of Section 58-39-130 of this chapter, including, but not limited to:

(1) The cost an electrical utility incurs in excess of the electrical utility's avoided cost rate, as defined in this section. All costs paid under avoided cost rates, or negotiated rates pursuant to PURPA, whichever is lower, shall be considered an avoided cost under Section 58-39-120(B) and shall be recovered under Section 58-27-865.

(2) The full cost of an electrical utility's investment in nongenerating distributed energy resources, such as, but not limited to, energy storage devices.

(3) The electrical utility's weighted average cost of capital as applied to the electrical utility's investment in distributed energy resources. The weighted average cost of capital means the utility's weighted average cost of (a) common equity, as most recently approved by the commission, and (b) long term debt. The capital costs of the resource shall include, but not be limited to, all reasonable and prudent costs associated with the design, siting, selection, acquisition, licensing, permitting, constructing, testing, and placing into service of the resource as well as capital maintenance and other capital costs associated with its repair, renewal, replacement, and upgrading. Such costs also shall include all reasonable and prudent costs incurred to expand, upgrade, or reconfigure transmission or distribution systems to accommodate power flows from the resource or to respond to other requirements placed by the resource on the electrical system, along with all other costs properly considered capital costs for a project or asset under generally accepted principles of regulatory or utility accounting or accounting orders issued by the commission. Capital costs shall include the utility's weighted average cost of equity and long-term debt applied

to the balance of construction work in progress for which capital costs are not yet being collected through a fuel cost component approved under this chapter and Section 58-27-865.

(4) Operating and maintenance expenses, taxes, insurance, depreciation, overheads, and all other expenses properly considered to be expenses associated with a project, asset, or program under generally accepted principles of regulatory, or utility accounting or accounting orders issued by the commission, provided that such expenses shall be recorded as a capital cost of the resource or program until such time as a fuel cost component providing for their recovery goes into effect.

(5) The electrical utility's incremental labor cost associated with implementing a distributed energy resource program.

(B) Upon approval of a distributed energy resource program, the commission shall direct the electrical utility which incurs incremental or avoided costs to submit to the commission and to the Office of Regulatory Staff, within such time and in such form as the commission may designate, its estimates of incremental or avoided costs for the next twelve months. The commission may hold a public hearing at any time between the twelve-month reviews to determine whether an increase or decrease in the fuel cost component designed to recover incremental or avoided costs should be granted. Upon conducting public hearings in accordance with law, the commission shall direct the electrical utility to place in effect an amount designed to recover, during the succeeding twelve months, the incremental or avoided costs determined by the commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period. This amount shall be a component of the fuel cost factor established under Section 58-27-865(A). The commission shall direct the electrical utility to send notice to the utility customers with the antecedent billing of the time and place of any public hearing to be held pursuant to this subsection, and the commission shall again direct the electrical utility to send notice to the utility customers with the next billing if the utility is granted a rate increase by the commission.

(C) Upon request by the Office of Regulatory Staff or the electrical utility, a public hearing must be held by the commission coincident with the fuel cost recovery proceeding required under Section 58-27-865 to determine whether an increase or decrease in the fuel cost component designed to recover incremental or avoided costs should be granted. If the request is by an electrical utility for an increase or decrease in the fuel cost factor, the commission shall direct the utility to send notice of the request and hearing to all customers with the next billing, and if the commission grants the rate request subsequent to the request and hearing, the commission shall direct the utility to send notice of the amount of the increase or decrease to all customers with the next billing.

(D) The commission is authorized to promulgate, in accordance with the provisions of this section, all regulations necessary to allow the recovery by electrical utilities of all their prudently incurred distributed energy resource program implementation costs incurred pursuant to Sections 58-39-130 and 58-39-140 of this chapter.

(E) No later than July 31, 2016, the Office of Regulatory Staff shall prepare and submit to the General Assembly with copies to all members of the State Regulation of Public Utilities Review Committee a report on the implementation of this chapter and Chapter 40 of this title. The Office of Regulatory Staff shall update this report no later than July 31, 2017, and each two years thereafter. Upon receipt and review of these reports, and in consultation with the General Assembly, the Public Utilities Review Committee shall make recommendations to the Office of Regulatory Staff as to any changes in implementation that may be needed.

(F) The authorization to propose or approve new components of DER programs shall sunset and expire on January 1, 2021, provided however that the cost recovery provisions of this chapter shall remain in force until the costs associated with all approved DER program components have been recovered.

Section 58-39-150. For the protection of consumers and to ensure that the cost of DER programs do not exceed a reasonable threshold, the commission must not approve a DER plan in which the

total incremental costs to be incurred by an electrical utility and recovered from the electrical utility's South Carolina retail customer classes exceeds the following annual amounts per number of accounts for costs that are incurred on or after January 1, 2014: residential: twelve dollars; commercial: one hundred twenty dollars; and industrial: twelve hundred dollars. The application of these caps to residential, commercial, and industrial accounts will be as set forth in the electrical utility's approved distributed energy resource program."

Net energy metering

SECTION 3. Title 58 of the 1976 Code is amended by adding:

"CHAPTER 40

Net Energy Metering

Section 58-40-10. As used in this section:

- (A) 'Commission' means the Public Service Commission of the State of South Carolina.
- (B) 'Customer' means the person who is named on the electrical utility bill for the premises.
- (C) 'Customer-generator' means the owner, operator, lessee, or customer-generator lessee of an electric energy generation unit which:
 - (1) generates electricity from a renewable energy resource;
 - (2) has an electrical generating system with a capacity of:
 - (a) not more than the lesser of one thousand kilowatts (1,000 kW AC) or one hundred percent of contract demand if a nonresidential customer; or
 - (b) not more than twenty kilowatts (20 kW AC) if a residential customer;
 - (3) is located on a single premises owned, operated, leased, or otherwise controlled by the customer;
 - (4) is interconnected and operates in parallel phase and synchronization with an electrical utility and complies with the applicable interconnection standards;
 - (5) is intended primarily to offset part or all of the customer-generator's own electrical energy requirements; and
 - (6) meets all applicable safety, performance, interconnection, and reliability standards established by the commission, the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, the federal Energy Regulatory Commission, and any local governing authorities.
- (D) 'Electrical utility' shall be defined as in Section 58-27-10; provided, however, that electrical utilities serving less than one hundred thousand customer accounts shall be exempt from the provisions of this chapter.
- (E) 'Net energy metering' means using metering equipment sufficient to measure the difference between the electrical energy supplied to a customer-generator by an electrical utility and the electrical energy supplied by the customer-generator to the electricity provider over the applicable billing period.
- (F) 'Renewable energy resource' means solar photovoltaic and solar thermal resources, wind resources, hydroelectric resources, geothermal resources, tidal and wave energy resources, recycling resources, hydrogen fuel derived from renewable resources, combined heat and power derived from renewable resources, and biomass resources.

Section 58-40-20. (A) Net energy metering rates approved by the commission under the terms of this chapter shall be the exclusive net energy metering rates available to customer-generators. Upon commission approval, such net energy metering rates shall supersede all prior net energy

metering rates. Customer-generators whose net energy metering facilities were energized prior to the availability of net energy metering rates approved by the commission under the terms of this chapter may remain in historic net energy metering programs through December 31, 2020.

(B) An electrical utility shall make net energy metering available to customer-generators on a first-come, first-served basis until the total nameplate generating capacity of net energy metering systems equals two percent of the previous five-year average of the electrical utility's South Carolina retail peak demand. No electrical utility shall be required to approve any application for interconnection from net energy metering customer-generators if the total rated generating capacity of all applications for interconnection from net energy metering customer-generators already approved to date by the electrical utility equals or exceeds two percent of the previous five-year average of the electrical utility's South Carolina retail peak demand.

(C) If determined to be prudent by the commission, the electrical utility may furnish, install, own, and maintain metering equipment needed to measure the kilowatt-hours purchased by the customer-generator from the utility, the kilowatt-hours generated or delivered to the electrical utility, and, if applicable under the utility's tariffs, to measure the kilowatt demand delivered by the electrical utility to the customer-generator. The electrical utility shall have the right to install special metering and load research devices on the customer-generator's equipment and the right to use the customer-generator's communication devices for communication with electrical utility's and the customer-generator's equipment.

(D) The net electrical energy measurement shall be calculated in the following manner:

(1) For a customer-generator, an electrical utility shall measure the net electrical energy produced or consumed during the billing period in accordance with normal metering practices for customers in the same rate class, either by employing a single, bidirectional meter that measures the amount of electrical energy produced and consumed, or by employing multiple meters that separately measure the customer-generator's consumption and production of electricity;

(2) If the electricity supplied by the electrical utility exceeds the electricity generated by the customer-generator during a billing period, the customer-generator shall be billed for the net electricity supplied by the electrical utility in accordance with normal practices for customers in the same rate class;

(3) Any energy generated by the customer-generator that exceeds the energy supplied by the electrical utility during a billing period shall not be used to offset the nonvolumetric electricity charges for that billing period;

(4) The utility shall maintain an account of any net excess kWh credits accruing from the customer-generator's excess generation and allow those kWh credits to be used to offset the customer-generator's energy usage during future billing periods. Annually, the utility shall pay the customer-generator for any accrued net excess generation at the utility's avoided cost for qualified facilities, zeroing-out the customer-generator's account of net excess kWh credits.

(E) Each electrical utility shall submit an annual net metering report to the Public Service Commission, with a copy to the Office of Regulatory Staff, including the following information for the previous calendar year:

- (1) the total number of customer-generator facilities;
- (2) the estimated gross generating capacity of its net-metered customer-generators;
- (3) the estimated net kilowatt hours received from customer-generators.

(F) Any and all costs prudently incurred pursuant to the provisions of this chapter by an electrical utility as approved by the commission and any and all commission approved benefits conferred by a customer-generator shall be recoverable by each entity respectively in the electrical utility's rates in accordance with these provisions:

(1) The electrical utility's general rates, tariffs, and any additional monthly charges or credits, in addition to any other charges or credits authorized by law, to recover the costs and confer the benefits of net energy metering shall include such measures necessary to ensure that the electrical

utility recovers its cost of providing electrical service to customer-generators and customers who are not customer-generators.

(2) Any charges or credits prescribed in item (1), and the terms and conditions under which they may be assessed shall be in accordance with a methodology established through the proceeding described in item (4). The methodology shall be supported by an analysis and calculation of the relative benefits and costs of customer generation to the electrical utility, the customer-generators, and those customers of the electrical utility that are not customer-generators.

(3) Upon approval of the methodology provided for in item (4), each electrical utility shall file its analysis of the net cost to serve customer-generators using the approved methodology and shall propose new net energy metering rates.

(4) No later than thirty days after the enactment of this act, the commission shall initiate a generic proceeding for purposes of implementing the requirements of this chapter with respect to the net energy metering rates, tariffs, charges, and credits of electrical utilities, specifically to establish the methodology to set any necessary charges and credits as required under items (1) and (2). All interested parties shall be allowed to participate. In its notice initiating such proceeding the commission must require the electrical utilities to propose methodologies required by item (1) and shall allow intervening parties to propose methodologies required by item (2). The Office of Regulatory Staff, pursuant to the requirements of Section 58-4-50, shall represent the public interest in this proceeding and shall serve as a facilitator to resolve disputes and issues between the parties to this proceeding.

(5) In evaluating the benefits and costs of customer generation as required by item (2), and the methodology for calculating such benefits and costs, the Office of Regulatory Staff may engage third parties with relevant prior experience conducting distributed generation cost-benefit studies. The cost of any experts and consultants engaged by the Office of Regulatory Staff for purposes of this proceeding shall be assessed to the electrical utilities pro rata based on their five-year average of retail peak demand and shall be recoverable by those electrical utilities through the base rate for fuel costs established pursuant to Section 58-27-865.

(6) In the event that the commission determines that future benefits from net energy metering are properly reflected in net metering rates because they provide quantifiable benefits to the utility system, its customers, or both, and to the degree such benefits are not then being recovered by the electrical utility in its base rates, then such future benefits shall be deemed an avoided cost and shall be recoverable pursuant to Section 58-27-865 by the electrical utility as an incremental cost of the distributed energy resource program.

(G) In no event shall the net energy metering provisions of this chapter be construed as allowing customer-generators to engage in meter aggregation, group/joint billing projects, and/or virtual net metering.

(H) The commission shall approve an electrical utility's proposed net energy metering rates that meet the requirements of this chapter, provided that the commission has previously approved that electrical utility's application to participate in a distributed energy resource program pursuant to Chapter 39, Title 58."

Lease of renewable electric generation facilities

SECTION 4. Chapter 27, Title 58 of the 1976 Code is amended by adding:

"Article 23

Lease of Renewable Electric Generation Facilities Program

Section 58-27-2600. As used in this article:

(A) ‘Customer-generator lessee’ means the lessee of a renewable electric generation facility which:

- (1) generates electricity from a renewable energy resource;
- (2) has an electrical generating system with a capacity of:
 - (a) not more than the lesser of one thousand kilowatts (1,000 kW AC) or one hundred percent of contract demand if a nonresidential customer; or
 - (b) not more than twenty kilowatts (20 kW AC) if a residential customer;
- (3) is located on a premises or residence owned, operated, leased, or otherwise controlled by the customer-generator lessee that is also the premises or residence served by the renewable electric generation facility;
- (4) is interconnected and operates in parallel phase and synchronization with the retail electric provider for the premises or residence and has been approved by that retail electric provider;
- (5) is intended only to offset part or all of the customer-generator lessee’s own retail electrical energy requirements for each respective premises or residence or to enable the customer-generator lessee to obtain a credit for or engage in the sale of energy from the renewable electric generation facility to that customer-generator lessee’s retail electric provider or its designee; and
- (6) meets all applicable safety, performance, interconnection, and reliability standards established by the commission or the retail electric provider, the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, the federal Energy Regulatory Commission, and any local governing authorities.

(B) ‘Retail electric provider’ means an electrical utility as defined in Section 58-27-10 and also means other entities that provide retail electric service in South Carolina, but excluding electric cooperatives organized under the laws of a state other than South Carolina.

Section 58-27-2610. (A) An entity that owns a renewable electric generation facility, located on a premises or residence owned or leased by an eligible customer-generator lessee to serve the electric energy requirements of that particular premises or residence or to enable the customer-generator lessee to obtain a credit for or engage in the sale of energy from the renewable electric generation facility to that customer-generator lessee’s retail electric provider or its designee, shall be permitted to lease such facility exclusively to a customer-generator lessee under a lease, provided that the entity complies with the terms, conditions, and restrictions set forth within this article and holds a valid certificate issued by the Office of Regulatory Staff. An entity owning renewable electric generation facilities in compliance with the terms of this article shall not be considered an ‘electrical utility’ under Section 58-27-10 if the renewable electric generation facilities are only made available to a customer-generator lessee for the customer-generator lessee’s use on the customer-generator lessee’s premises or the residence where the renewable electric generation facilities are located, or for the sale of energy to that customer-generator lessee’s retail electric provider or its designee, and pursuant to a lease.

(B) All customer-generator lessees that interconnect renewable electric generation facilities to a retail electric provider’s transmission or distribution system must enroll in the applicable rate schedules made available by that retail electric provider, subject to the participation limitations set forth therein or in the policy adopted by the retail electric provider not subject to Section 58-40-20(B), and the customer-generator lessee shall otherwise comply with all requirements of Section 58-40-10, et seq., or the policy adopted by the retail electric provider not subject to Section 58-40-10, et seq.

(C) To comply with the terms of this article, each customer-generator lessee renewable electric generation facility shall serve only one premises or residence, and shall not serve multiple customer-generator lessees or multiple premises or residences.

(D) Any lease of a renewable electric generation facility not entered into pursuant to this article is prohibited. The owner of a renewable electric generation facility subject to any lease entered into outside of this program shall be considered an ‘electrical utility’ under Section 58-27-10.

(E) This section shall not be construed as allowing any sales of electricity from renewable electric generation facilities directly to any customer of any retail electric provider by the owner. This article shall not be construed as abridging or impairing any existing rights or obligations, established by contract or statute, of retail electric providers to serve South Carolina customers. The electrical output from any renewable electric generation unit leased pursuant to this program shall be the sole and exclusive property of the customer-generator lessee.

(F) An entity and its affiliates that lawfully provide retail electric service to the public may offer leases of renewable generation facilities in those areas or territories where it provides retail electric service. No such provider or affiliate shall offer or enter into leases of renewable generation facilities in areas served by another retail electric provider.

(G) The costs an electrical utility incurs in marketing, installing, owning, or maintaining solar leases through its own leasing programs as a lessor shall not be recovered from other nonparticipating electrical utility customers through rates, provided, however, that an electrical utility and the customer-generator lessees which lease facilities from it may participate on an equal basis with other lessors and lessees in any applicable programs provided pursuant to Chapter 39 of this title, 1976 Code Sections 58-39-110, et seq. and nothing in this section shall prevent the reasonable and prudent costs of a utility’s distributed energy resource programs, including the provision of incentives to its own lessees and other allowable costs, from being reflected in a utility’s rates as provided for in Chapter 39 or as otherwise permitted under generally applicable regulatory principles.

(H) The total installed capacity of all renewable electric generation facilities on a retail electric provider’s system that are leased pursuant to this article shall not exceed two percent of the previous five-year average of the retail electric provider’s South Carolina residential and commercial contribution to coincident retail peak demand and two percent of the previous five-year average of the retail electric provider’s South Carolina industrial contribution to coincident retail peak demand. A provider may refuse to interconnect with customers where to do so would result in this limitation being exceeded. Every retail electric provider must establish a program for new installations of leased equipment to permit the reservation of capacity on its system including provisions to prevent or discourage abuse of such programs. Such programs must provide that only prospective individual customer-generator lessees may apply for, receive, and hold reservations. Each reservation shall be for a single customer premises only and may not be sold, exchanged, traded, or assigned except as part of the sale of the underlying premises. Requests for reservations to electrical utilities as defined in Section 58-27-10 shall accompany applications for interconnection of the leased facilities pursuant to Chapter 40, Title 58 and the reservation shall remain in force only so long as the application or permit for interconnection remains active. Electrical utilities as defined in Section 58-27-10 shall submit programs establishing the terms of such reservations to the commission for approval.

(I) Notwithstanding the provisions of subsection (H), for an electrical utility for which more than fifty percent of the electricity that it generates in South Carolina comes from renewable resources, the total installed capacity of all renewable electric generation facilities on its system that are leased pursuant to this article shall not exceed one-tenth of one percent of the previous five-year average of the electrical utility’s South Carolina residential and commercial contribution to coincident retail peak demand and one-tenth of one percent of the previous five-year average of the electrical utility’s South Carolina industrial contribution to coincident retail peak demand. Electrical utilities meeting the requirements of this subsection shall not be required to establish a capacity reservation program as required by subsection (H).

(J)(1) The provisions of this Article 23 related to leased generation facilities shall not apply to:

(a) facilities serving a single premises that are not interconnected with a retail electric provider;

(b) facilities owned by customer generators but financed by a third party; or

(c) facilities used exclusively for standby emergency service or participation in an approved standby generation program operated by a retail electric provider.

(2) The commission may promulgate regulations consistent with this section interpreting the scope of these exemptions as to electrical utilities.

Section 58-27-2620. (A) Before any entity other than an entity lawfully providing retail electric service to the public in this State commences to do business as a lessor of renewable electric generation facilities under the terms of this article, that entity shall submit an application to the Office of Regulatory Staff and provide such information as the Office of Regulatory Staff shall require. In performing its responsibilities under this article, the Office of Regulatory Staff must balance the state's interest in promoting a market for the provision of renewable electric generation facilities as permitted by this article with an appropriate level of protection for customer-generator lessees to ensure fair and accurate marketing practices and ensure acceptable performance of renewable electric generation facilities and lessors.

(B) The application shall be accompanied by such information as the Office of Regulatory Staff shall require and the Office of Regulatory Staff may condition its approval on such terms as the Office of Regulatory Staff shall determine to be just and reasonable to advance the goals of this article of balancing the state's interest in promoting a market for the provision of renewable electric generation facilities as permitted by this article, with an appropriate level of protection for customer-generator lessees and to ensure fair and accurate marketing practices.

(C) Upon review of the application and a finding that the applicant is fit, willing, and able to conduct business in accordance with the provisions of this article, the Office of Regulatory Staff shall approve the application and issue the lessor a certificate permitting the lessor to market and lease renewable electric generation facilities to customer-generator lessees under the terms of this article.

(D) The Office of Regulatory Staff is authorized to require the regular updating of information by certificate holders.

(E) The Office of Regulatory Staff shall receive, compile and investigate customer complaints arising under this article and shall attempt to negotiate consent agreements or other settlements resolving alleged violations of this article.

(F) As concerns potential violations of this article, lessors of distributed generation resources and their officers, agents, employees, or customers shall be subject to the investigatory powers provided in Sections 58-4-50 and 58-4-55 to the Office of Regulatory Staff regarding public utilities.


(G) For the protection of the consuming public, the Office of Regulatory Staff may file a petition with the Administrative Law Court requesting revocation of a certificate for violations of this article. In appropriate circumstances, the Office of Regulatory Staff may request the immediate revocation of a certificate.

(H) It shall be a violation of law punishable by civil penalty of not more than ten thousand dollars per occurrence for any person subject to subsection (A), either directly or indirectly:

(1) to solicit business as a lessor of renewable electric generation facilities without a valid certificate issued under this section or otherwise in violation of the terms of this article; or

(2) to engage in any unfair or deceptive practice in the leasing of renewable electric generation facilities.

(I) An aggrieved person with standing may file a request for a contested case of a decision of the Office of Regulatory Staff with the Administrative Law Court within thirty days of such decision.



Section 58-27-2630. (A) Not more than thirty days after installation of a renewable electric generation facility leased to a customer-generator lessee, the lessor shall register the facility with the Office of Regulatory Staff on forms developed and provided by the Office of Regulatory Staff. This registration information must include:

- (1) the name, mailing, and electronic mail address and telephone number of the lessor-owner;
- (2) the nameplate generating capacity of the facility and its expected annual energy output;
- (3) physical location of the facility;
- (4) the name, mailing, email address, and telephone number of the customer-generator lessee;
- (5) a description of the intended use of the facility and its output;
- (6) a list of all federal, state, and local licenses and permits required for the construction and operation of the facility, along with a statement regarding whether each has been obtained or applied for;
- (7) the date the facility began or will begin operating;
- (8) the name of the retail electric provider to which the facility has been or will be interconnected;

(9) an affidavit from the customer-generator lessee that it will not sell, resell, or attempt to sell or resell the electrical output of the facility to any person, corporation, or entity, other than the customer-generator lessee's retail electric provider or its designee, that the primary purpose for the operation of the renewable electric generation facility is to generate electricity for the benefit of the premises where it is located, and that the facility has been or will be operated in substantial compliance with all federal and state laws, rules, and regulations and all local codes and ordinances.

(B) Office of Regulatory Staff shall maintain a registry of facilities registered pursuant to subsection (A). This information must be available for inspection by the public and is subject to the South Carolina Freedom of Information Act. The Office of Regulatory Staff may require the updating of information on the registry.

(C) The Office of Regulatory Staff shall review the program established pursuant to this article and issue a report to the State Regulation of Public Utilities Review Committee no later than December 31, 2016, relating to its review, including recommendations regarding the expansion, reduction, or continuance of the program.


Section 58-27-2640. The Office of Regulatory Staff shall have the authority to investigate claims of violations of the provisions of Section 58-27-2610 committed by electrical utilities and lessors of renewable electric generation facilities.

Section 58-27-2650. Section 58-27-2610 shall not become effective until the commission has approved net energy metering rates referenced in Chapter 40, Title 58 for all investor-owned electrical utilities serving more than one hundred thousand retail customer accounts in South Carolina."

Report required

SECTION 5. Article 7, Chapter 27, Title 58 of the 1976 Code is amended by adding:

"Section 58-27-1050. The Office of Regulatory Staff, with guidance and feedback from the electrical utilities and other interested parties, shall investigate and report to the Public Service Commission on fixed costs, fixed charges, and the extent of cost shifting that is attributable to distributed energy resources within current utility cost of service ratemaking methodologies, cost allocations, and rate designs, with a focus on the implications distributed energy resources could



have for that business model in the future. The report shall review how to ensure a fair allocation of costs and benefits between consumers who utilize distributed energy resources and consumers who do not utilize distributed energy resources, as well as suggesting any necessary or prudent changes to existing or future rate structures. The report shall include a general overview of cost shifting that is attributable to or arising from historical cost of service ratemaking related to the current utility business model, specifically the cost of service ratemaking methodology, the cost allocations and rate designs. The findings shall include public comment and be reported to the Public Service Commission by December 31, 2015.”

Promulgation of standards; certain generation activities prohibited

SECTION 6. Article 3, Chapter 27, Title 58 of the 1976 Code is amended by adding:

“Section 58-27-460. (A) The commission shall promulgate standards for interconnection of renewable energy facilities and other nonutility-owned generation with a generation capacity of two thousand kilowatts (2,000 kW AC) or less to an electrical utility’s distribution system.

(B) No customer-generator or customer-generator lessee shall connect or operate an electric generation unit in parallel phase and synchronization with any electrical utility without written approval by the electrical utility that all of the commission’s requirements have been met. For a customer-generator or customer-generator lessee who violates this provision, an electrical utility immediately may and without notice disconnect the electric facilities of the customer-generator or customer-generator lessee and terminate the customer-generator’s or customer-generator lessee’s electric service.”

Policy to be adopted and reported

SECTION 7. Each distribution electric cooperative board shall consider the general objectives of Section 58-40-10, et seq. and any methodology promulgated thereunder in adopting a net energy metering policy. Each distribution electric cooperative shall adopt a net energy metering policy and shall report their policy to the ORS within one year of the passage of this act. Provided, however, that the requirements of this section do not apply to an electric cooperative organized under the laws of a state other than South Carolina.

Investigation and report

SECTION 8. Each electric cooperative shall investigate the relationship between fixed costs, fixed charges, and the extent of cost shifting that is attributable to distributed energy resources within current cost of service ratemaking methodologies, cost allocations, and rate designs, with a focus on the implications distributed energy resources could have for their business models in the future. The report shall review how to ensure a fair allocation of costs and benefits between consumers who utilize distributed energy resources and consumers who do not utilize distributed energy resources, as well as suggesting any necessary or prudent changes to existing or future rate structures. The report shall include a general overview of cost shifting that is attributable to or arising from historical cost of service ratemaking related to the current utility business model, specifically the cost of service ratemaking methodology, the cost allocations, and rate designs. The investigation and report may be coordinated and consolidated into a single project. The findings shall be filed with the Office of Regulatory Staff by December 31, 2015. Provided, however, that the provisions of this section do not apply to an electric cooperative organized under the laws of a state other than South Carolina.



Exemptions

SECTION 9. If the application of the provisions of this act to any wholesale electrical contract existing on the date of its adoption is determined to impair unlawfully any term of such contract or to add material costs to either party, then that contract will be exempt from the terms of this act to the extent necessary to cure such impairment or to avoid the imposition of additional material costs.

Construction of provisions

SECTION 10. Article 23, Chapter 27, Title 58 shall be construed as a whole, and all parts of it are to be read and construed together. If any part of this article shall be adjudged by any court of competent jurisdiction to be invalid, the remainder of this article shall be invalidated. Nothing herein shall be construed to affect the parties' right to appeal the matter.

Time effective

SECTION 11. This act takes effect upon approval by the Governor.

Ratified the 29th day of May, 2014.

Approved the 2nd day of June, 2014.
